TRAFFIC COMMISSION REPORT
December 16, 2010

Item VB

NON EMERGENCY MEDICAL TRANSPORTATION

ISSUE:

The Traffic Commission discussed criteria for determining the convenience and necessity for ambulance services in Burbank at the November meeting. The item was tabled until December for staff to provide regulations adopted by other jurisdictions. Staff collected these regulations, distributed them to the Commission members, and posted them on the City of Burbank website www.ci.burbank.ca.us under Departments, Public Works, Traffic, and Traffic Commission. Copies are available for review in then Public Works Department offices at 150 North Third Street, Burbank, California.

BACKGROUND:

The Burbank Municipal Code (BMC) requires the Traffic Commission to issue a Certificate of Public Convenience and Necessity. However, the BMC is silent on the specific criteria used for evaluation; particularly concerning the qualifications of the firm in Section 3-4-1305 Granting Permit and Certificate (see Attachment 1 for the current regulation of non emergency medical transportation).

DISCUSSION:

Staff has provided the Commission with regulations in City of Glendale, the City of Los Angeles and the County of Los Angeles. The City of Pasadena does not regulate non emergency medical services. The County regulates ambulance and ambulete services differently, since ambulance services include emergency medical operations while ambulete service does not. A total of 20 services have business licenses in Burbank.

The City Attorney and Terre Hirsch are available to discuss the issues.

CONCLUSIONS:

Staff requests direction from the Traffic Commission on whether the Commission still desires to pursue developing an ordinance to regulate non emergency medical transportation.

RECOMMENDATIONS:

If the Commission desires to pursue additional regulations, staff suggests that the Traffic Commission appoint a subcommittee of Commission members to review the available regulations and determine a process for developing a proposed ordinance for City Council consideration.

ATTACHMENT:

1. BMC Section 3-4-1305

Attachment 1 – BMC Codes 3-4-1304 to 3-4-1306

3-4-1304: INVESTIGATION AND HEARING:
Upon the filing of such application, the License Division shall refer the application to the Traffic Commission, which shall investigate the matter and conduct a hearing, if it deems a hearing to be necessary. Notice of such hearing shall be given to all persons to whom permits and Certificates of Public Convenience and Necessity have been issued. Due notice shall also be given the general public by posting a notice of such hearing in the main lobby of the City Hall and as required by California's Ralph M. Brown Act (Gov.C. Sections 54950 et seq.). Any interested person may file with the Traffic Commission a memorandum in support of or opposition to the issuance of a permit and certificate. At such hearing testimony and other evidence may be received. The Traffic Commission shall have power to determine all issues relative to the granting or denying of such permits and certificates. [Formerly numbered Section 8-109; renumbered by Ord. No. 3058, eff. 2/21/87; Amended by Ord. No. 3755, eff. 12/26/08; 3048, 2194.]

3-4-1305: GRANTING PERMIT AND CERTIFICATE:
Upon completing its investigation or hearing, the Traffic Commission shall grant the applicant a permit and Certificate of Public Convenience and Necessity if it finds that further private ambulance service in the City is required by the public convenience and necessity and that the applicant is fit, willing, and able to perform such public transportation and to conform to the provisions of this article and the rules promulgated by the Traffic Commission; otherwise, the application shall be denied. In making its finding, the committee shall take into consideration the number of private ambulances already in operation, whether existing transportation is adequate to meet the public need, the probable effect of increased service on local traffic conditions, and the character, experience, and responsibility of the applicant. Every person holding a valid license and permit to engage in the private ambulance business in the City, who was not required to obtain a Certificate of Public Convenience and Necessity at the time of obtaining such license and permit, shall be deemed to be providing private ambulance service in the City required by the public convenience and necessity, and shall also be deemed to be fit, willing and able to perform such public transportation and to conform to the provisions of this article and the rules promulgated by the Traffic Commission, and a Certificate of Public Convenience and Necessity shall be issued by the committee to such person without application therefor and without a public hearing thereon. [Formerly numbered Section 8-110; renumbered by Ord. No. 3058, eff. 2/21/87; Amended by Ord. No. 3755, eff. 12/26/08; 2194.]

3-4-1306: ISSUANCE OF PERMIT AND CERTIFICATE:
If the permit and Certificate of Public Convenience and Necessity are granted, the Traffic Commission shall approve the application therefor and transmit the same to the License Division for issuance of the permit and certificate. The certificate shall state the name and address of the applicant, the number of vehicles authorized under the certificate and the date of issuance. [Formerly numbered Section 8-111; renumbered by Ord. No. 3058, eff. 2/21/87; Amended by Ord. No. 3755, eff. 12/26/08; 2194]

TRAFFIC COMMISSION REPORT
December 16, 2010

Item VC

TRAFFIC SIGNAL TIMING

ISSUE:

The Traffic Commission requested information on the traffic signal timing at four intersections near Empire Shopping Center and at First Street / Olive Avenue

BACKGROUND:

At the November meeting, the Traffic Commission wished to discuss the timing at five signalized intersections. The timing at these locations varies from 90 seconds to 106 seconds depending on the time of day. These data are included on the timing sheets. Included as Attachment 2 is a recent memorandum given to City Council on the traffic signal timing and operation near shopping centers.

RECOMMENDATIONS:

Receive and File

ATTACHMENTS:

1. Traffic Signal Timing Sheets for five Intersections
2. Playlist Item 1295 – Traffic Signal Timing

TS-168 Olive & First 03-23-09

CITY OF BURBANK
PUBLIC WORKS DEPARTMENT
Traffic Engineering Division

TRAFFIC SIGNAL
Phase Timing

Prepared by: STEPHEN DOMENICO	Date	03/25/09
Checked by: BENJAMIN KIM	Date	5/11/09
Approved by: KEN JOHNSON	Date	5/13/09
Completed by:	Date	5/12/09

168 First St & Olive Ave
(Intersection Name)

NOTES: Add PED Offset Interrupter Circuit.

	Interval	PHASE 1	2	3	4	5	6	7	8
0	WALK	0	7	0	7	0	7	0	7
1	DONT WALK	0	20	0	17	0	20	0	15
2	MIN INITIAL	4	7	4	10	4	7	4	10
3	TYPE 3 LIMIT	0	20	0	15	0	20	0	0
4	ADD PER VEH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	VEH EXT	1.5	4.5	2.0	4.5	2.0	4.5	1.5	4.0
6	MAX GAP	1.5	5.5	2.0	5.5	2.0	5.5	1.5	4.0
7	MIN GAP	1.5	3.5	2.0	3.5	2.0	3.5	1.5	4.0
8	MAX LIMIT	15	30	20	40	20	30	15	40
9	MAXIMUM 2	15	30	20	40	20	30	15	40
A	ADV/DLY WLK	0	0	0	0	0	0	0	0
B	MIN PED CLR	0	0	0	0	0	0	0	0
C	COND SRV MIN	0	0	0	0	0	0	0	0
D	REDUCE EVERY	0.0	1.0	0.0	1.0	0.0	1.0	0.0	0.0
E	YELLOW	3.5	4.0	3.5	4.0	3.5	4.0	3.5	4.0
F	RED CLEAR	0.5	1.0	0.5	1.0	0.5	1.0	0.5	1.0

PHASE BANK 1 < C + 0 + F = 1 >

		ALTERNATE TIMING 9	A	B	C	D
1	Ph. 1	0	0	0	0	0
2	Ph. 2	0	0	0	0	0
3	Ph. 3	0	0	0	0	0
4	Ph. 4	0	0	0	0	0
5	Ph. 5	0	0	0	0	0
6	Ph. 6	0	0	0	0	0
7	Ph. 7	0	0	0	0	0
8	Ph. 8	0	0	0	0	0
		Maximum Initial	Alternate Walk	Alternate FDW	Alternate Initial	Alternate Extension

ALL RED START: <F/ + C + 0> = 6.0
RED REVERT: <F/ 1 + 0 + F> = 3.0
FLASH START: <F/ 1 + 0 + E> = 0.0

PREEMPT		E
RR1 DLY	0	
RR1 CLR	0	
EVA DLY	0	
EVA CLR	0	
EVB DLY	0	
EVB CLR	0	
EVC DLY	0	
EVC CLR	0	
EVD DLY	0	
EVD CLR	0	
RR2 DLY	0	
RR2 CLR	0	
EV CLR		
EV DLY		
RR CLR		
RR DLY		

PHASE FUNCTION FLAGS
Column F

		12345678
0	PERMIT	
1	RED LOCK	_2___6__
2	YELLOW LOCK	
3	VEH MIN CALL	___4___8
4	PED RECALL	
5	PEDESTRIANS	
6	REST IN WALK	
7	RED REST	
8	DOUBLE ENTRY	_2___6__
9	VEH MAX CALL	
A	SOFT RECALL	
B	MAXIMUM 2	
C	COND SERVICE	
D	MAN CONT CALL	
E	YELLOW START	
F	FIRST PHASES	4 8

< C + 0 + F = 1 >

SPECIALS
Column F

0	FAST GRN FLH	
1	GREEN FLSH	
2	FLASH WALK	
3	GUAR PASS	
4	SIMUL GAP	
5	SEQ TIMING	
6	ADV WALK	
7	DELAY WALK	
8	EXT RECALL	
9	Sart OLapGreen	
A	MAX EXTEN	
B	INH PED RSRV	
C	SEMI ACTUA.	
D	O'LAP STRT UP	
E	STRT VEH CALL	12345678
F	STRT PED CALL	_2_4_6_8

Specials <C + 0 + F = 2>

Controller Intervals
0 = Walk
1 = FDW
2 = MIN. Green
3 =
4 = Var. Initial
5 = Extension
6 =
7 = Reduce Gap
8 = Red Rest
9 = Preempt
A = Stop Time
B = Red Revrt
C = Gap Term.
D = MAX Term.
E = Forceoff
F = Red Clear.

INPUT KEYSTROKES:
1) Set PAGE to required BANK #
< C+0+PAGE = BANK # >
2) Key stroke: PAGE + COLUMN + ROW

To Enable "E" Page, Set < F/1 + 9 + E = Not Zero >

MANUAL PLAN SELECT:
(C/0 + A + 1) = 0
AUTO = 0 FREE = 14
PLAN = 1 - 9 FLASH= 15

MANUAL OFFSET SELECT:
(C/0 + B + 1) = 0
AUTO = 0 OFFSET B = 2
OFFSET A = 1 OFFSET C = 3

COMM ADDRESS:
(C/0 + 0 + 0) = 23

ZONE NUMBER:
(C/0 + 0 + 1) = 1

AREA NUMBER:
(C/0 + 0 + 2) = 1

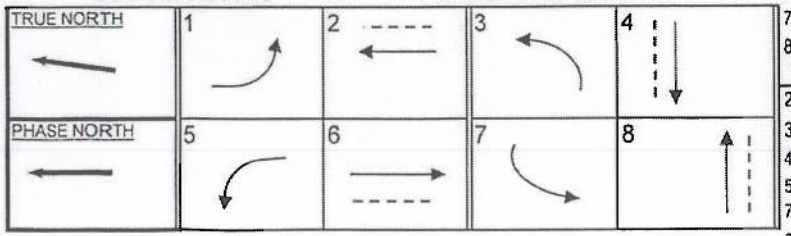
AREA ADDRESS:
(C/0 + 0 + 3) = 68

EXCL. PED. OPERATION:
WALK:
(F/1+0+0) = 0
DONT WALK:
(F/1+0+1) = 0
RED CLEAR:
(F/1+0+2) = 0.0

EXTRA 1
1 = TBC Type 1
2 = NEMA External Coordinator
3 = Auto Daylight Savings
4 = EV Preempt Advance
5 = Expanded Status Report
6 = International Ped.
7 = Clear Outputs During Flash
8 = Split Ring Operation

IC SELECT
2 = 2 Way Modem
3 = 7 Wire Slave
4 = Flash/Free
5 = Simplex Master
7 = 7 Wire Master
8 = Offset Interruptor

PHASE DIAGRAM
E-W Street: Olive Ave N-S Street: First Street



CONTROLLER CONFIGURATION FLAGS

		Column E	Column F	EXTRA 2
0	EXCLUSIVE			1 = AWB On during Phase Initial
1	RR 1 CLEAR		EXT PERMIT 1	
2	RR 2 CLEAR		EXT PERMIT 2	
3	RR 2 LTD SRV		EXCLU PED	
4	PROT/PERM		Preemp Non Lock	2 = LMU installed
5	FLH TO PREMT		PED 2 P OUT _2_	FLASH TO PREMPT
6	FLASH ENTRY		PED 6 P OUT ___6___	1 = EV A
7	DSABL MIN YEL		PED 4 P OUT ___4___	2 = EV B
8	DSABL OVP YEL		PED 8 P OUT ___8___	3 = EV C
9	OVP FLH YEL		FLH YELLOW	4 = EV D
A	EM. VEH. A		Low Prio A PH	5 = RR 1
B	EM. VEH. B		Low Prio B PH	6 = RR2
C	EM. VEH. C		Low Prio C PH	7 = SE 1
D	EM. VEH. D		Low Prio D PH	8 = SE 2
E	EXTRA 1	1_3_5	RESTRICTED	
F	IC SELECT	2	EXTRA 2	

< C + 0 + E = 125 > < C + 0 + E = 125 >

CITY OF BURBANK
PUBLIC WORKS DEPARTMENT
Traffic Engineering Division

TRAFFIC SIGNAL
Coordination Timing

168 First St & Olive Ave			
Prepared by:	STEPHEN DOMENICO	Date	03/25/09
Checked by:	BENJAMIN KIM	Date	

Add PED Offset Interrupter Circuit.

		PLAN NUMBER								
		1	2	3	4	5	6	7	8	9
0	CYCLE	90	90	90	0	0	0	0	0	0
1	FORCE 1	15	15	15	0	0	0	0	0	0
2	FORCE 2	47	47	47	0	0	0	0	0	0
3	FORCE 3	72	72	72	0	0	0	0	0	0
4	FORCE 4	0	0	0	0	0	0	0	0	0
5	FORCE 5	47	47	47	0	0	0	0	0	0
6	FORCE 6	32	32	32	0	0	0	0	0	0
7	FORCE 7	64	64	64	0	0	0	0	0	0
8	FORCE 8	0	0	0	0	0	0	0	0	0
9	RING OFFSET	0	0	0	0	0	0	0	0	0
A	OFFSET 1	34	34	69	0	0	0	0	0	0
B	OFFSET 2	0	0	0	0	0	0	0	0	0
C	OFFSET 3	0	0	0	0	0	0	0	0	0
D	END PERM 1	15	15	15	0	0	0	0	0	0
E	HOLD RELEASE	255	255	255	0	0	0	0	0	0
F	ZONE OFFSET	0	0	0	0	0	0	0	0	0

< C + 0 + C = 1 >

		COLUMN E								COLUMN F							
		1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
0										0	LAG FREE	_	2	_	4	_	6	_	8
1	SYNC Plan	_	_	_	4	_	_	_	8	1	LAG PLAN	_	2	_	4	5	_	_	8
2	SYNC Plan	_	_	_	4	_	_	_	8	2	LAG PLAN	_	2	_	4	5	_	_	8
3	SYNC Plan	_	_	_	4	_	_	_	8	3	LAG PLAN	_	2	_	4	5	_	_	8
4	SYNC Plan	_	_	_	4	_	_	_	8	4	LAG PLAN	_	2	_	4	_	6	_	8
5	SYNC Plan	_	_	_	4	_	_	_	8	5	LAG PLAN	_	2	_	4	_	6	_	8
6	SYNC Plan	_	_	_	4	_	_	_	8	6	LAG PLAN	_	2	_	4	_	6	_	8
7	SYNC Plan	_	_	_	4	_	_	_	8	7	LAG PLAN	_	2	_	4	_	6	_	8
8	SYNC Plan	_	_	_	4	_	_	_	8	8	LAG PLAN	_	2	_	4	_	6	_	8
9	SYNC Plan	_	_	_	4	_	_	_	8	9	LAG PLAN	_	2	_	4	_	6	_	8
A	NEMA SYN	_	_	_	_	_	_	_	_	A	EXT. LAG	_	2	_	4	5	_	_	8
B	NEMA HOL	_	_	_	_	_	_	_	_	B									
C										C									
D										D									
E	COORD EX	1	_	_	_	_	_	_	_										
F																			

< C + 0 + C = 1 >

COORDINATION EXTRA:
1- Programmed Walk Time for SYNC Phases

COLUMN 2
Coord Min.

1	10
2	20
3	15
4	20
5	15
6	20
7	10
8	20

< C + 0 + C = 5 >

DIAL UP"stand alone" MODEM INTERFACE.
NOTE: If "Non-Zero," parity will be DISABLED for "Smart Modem" Operation.
< C/5 +D+0 >= _____

TRANSITION TYPE:
< C/5 + 1 + 9 > = 1.2

0.X = SHORTWAY
1.X = DWELL
X.1 THRU X.4 = NUMBER OF CYCLES WHEN LENGTHENING

LAG HOLD PHASES:
< C/5 + 1 + A > = _____

7-WIRE SYNC TIME:
< C/5 + 1 + C > = _____

Low Priority Channel:
< E/125 + C + 8 > : _____
1 - Channel A
2 - Channel B
3 - Channel C
4 - Channel D

Daylight Savings Time

Begin Month	<C/5+2+A>	0
Begin Week	<C/5+2+B>	0
End Month	<C/5+2+C>	0
End Week	<C/5+2+D>	0

Plan # -->		1	2	3	4	5	6	7	8	9	
0	PED ADJUST	5	5	5	0	0	0	0	0	0	0
1	STRT PERM 2	0	0	0	0	0	0	0	0	0	1
2	END PERM 2	0	0	0	0	0	0	0	0	0	2
3	STRT PERM 3	0	0	0	0	0	0	0	0	0	3
4	END PERM 3	0	0	0	0	0	0	0	0	0	4
5	RSERVE TIME	0	0	0	0	0	0	0	0	0	5
		1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	
6	RSERVE PH	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	6
7											7
8	PRETIMED	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	8
9	MAX RECALL	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	9
A	PERM 1 VEH	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	A
B	PERM 1 PED	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	B
C	PERM 2 VEH	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	C
D	PERM 2 PED	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	D
E	PERM 3 VEH	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	E
F	PERM 3 PED	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	F

COORDINATION PAGE 2 < C + 0 + C = 2 >

Advance Warning Beacon - Sign 1

Time Before Yellow	<F/1+C+E>	0.0
Phase Number	<F/1+C+F>	0

Advance Warning Beacon - Sign 2

Time Before Yellow	<F/1+D+E>	0.0
Phase Number	<F/1+D+F>	0

Min Green Before PE Force Off

Min Time, sec.	<F/1+0+8>	0

Max Preemt Time Before Failure

Max Time, min.	<F/1+0+9>	255

Min Time Bet.Same Preempts
(Does Not Apply To Railroad Preempt)

Min Time, sec.	<F/1+0+A>	0

CITY OF BURBANK
PUBLIC WORKS DEPARTMENT
Traffic Engineering Division

TRAFFIC SIGNAL
Phase Timing

Prepared by: STEPHEN DOMENICO		Date 02/09/09
Checked by: BENJAMIN KIM		Date 02/12/09
Approved by: KEN JOHNSON		Date 2/12/09
Completed by:		Date 2/17/09

281 Empire Ave & Valpreda St
(Intersection Name)

NOTES:

	Interval	PHASE 1	2	3	4	5	6	7	8
0	WALK	0	7	0	7	0	7	0	7
1	DONT WALK	0	17	0	19	0	12	0	17
2	MIN INITIAL	4	10	0	4	4	10	0	4
3	TYPE 3 LIMIT	0	20	0	0	0	20	0	0
4	ADD PER VEH	0.0	2.0	0.0	0.0	0.0	2.0	0.0	0.0
5	VEH EXT	2.0	4.0	0.0	3.0	2.0	4.0	0.0	3.0
6	MAX GAP	2.0	6.0	0.0	3.0	2.0	6.0	0.0	3.0
7	MIN GAP	2.0	2.0	0.0	3.0	2.0	2.0	0.0	3.0
8	MAX LIMIT	25	40	0	25	20	40	0	40
9	MAXIMUM 2	25	40	0	25	20	40	0	40
A	ADV/DLY WLK	0	0	0	0	0	0	0	0
B	MIN PED CLR	0	0	0	0	0	0	0	0
C	COND SRV MIN	0	0	0	0	0	0	0	0
D	REDUCE EVERY	0.0	1.0	0.0	0.0	0.0	1.0	0.0	0.0
E	YELLOW	3.5	4.0	0.0	3.5	3.0	4.5	0.0	3.5
F	RED CLEAR	0.5	2.0	0.0	1.0	0.5	2.0	0.0	1.0

PHASE BANK 1 < C + 0 + F = 1 >

		ALTERNATE TIMING 9	A	B	C	D
1	Ph. 1	0	0	0	0	0
2	Ph. 2	0	0	0	0	0
3	Ph. 3	0	0	0	0	0
4	Ph. 4	0	0	0	0	0
5	Ph. 5	0	0	0	0	0
6	Ph. 6	0	0	0	0	0
7	Ph. 7	0	0	0	0	0
8	Ph. 8	0	0	0	0	0

	Maximum Initial	Alternate Walk	Alternate FDW	Alternate Initial	Alternate Extension
ALL RED START: <F/ + C + 0> =	6.0				
RED REVERT: <F/ 1 + 0 + F> =	3.0				
FLASH START: <F/ 1 + 0 + E> =	0.0				

PREEMPT		PHASE FUNCTION FLAGS Column F		SPECIALS Column F		Controller Intervals
RR1 DLY	0	0 PERMIT	12_456_8	0 FAST GRN FLH		0 = Walk
RR1 CLR	0	1 RED LOCK		1 GREEN FLSH		1 = FDW
EVA DLY	0	2 YELLOW LOCK		2 FLASH WALK		2 = MIN. Green
EVA CLR	0	3 VEH MIN CALL	_2___6__	3 GUAR PASS		3 =
EVB DLY	0	4 PED RECALL	_2___6__	4 SIMUL GAP		4 = Var. Initial
EVB CLR	0	5 PEDESTRIANS		5 SEQ TIMING		5 = Extension
EVC DLY	0	6 REST IN WALK		6 ADV WALK		6 =
EVC CLR	0	7 RED REST		7 DELAY WALK		7 = Reduce Gap
EVD DLY	0	8 DOUBLE ENTRY	___4___8	8 EXT RECALL		8 = Red Rest
EVD CLR	0	9 VEH MAX CALL		9		9 = Preempt
RR2 DLY	0	A SOFT RECALL		A MAX EXTEN		A = Stop Time
RR2 CLR	0	B MAXIMUM 2		B INH PED RSRV		B = Red Revrt
EV CLR		C COND SERVICE		C SEMI ACTUA.		C = Gap Term.
EV DLY		D MAN CONT CALL		D O'LAP STRT UP		D = MAX Term.
RR CLR		E YELLOW START		E STRT VEH CALL	12_456_8	E = Forceoff
RR DLY		F FIRST PHASES	2 6	F STRT PED CALL	_2_4_6_8	F = Red Clear.

< C + 0 + F = 1 > Specials <C + 0 + F = 2>

INPUT KEYSTROKES:
1) Set PAGE to required BANK #
< C+0+PAGE = BANK # >
2) Key stroke: PAGE + COLUMN + ROW

To Enable "E" Page, Set < F/1 + 9 + E = Not Zero >

MANUAL PLAN SELECT:
(C/0 + A + 1) = 0
AUTO = 0 FREE = 14
PLAN = 1 - 9 FLASH= 15

MANUAL OFFSET SELECT:
(C/0 + B + 1) = 0
AUTO = 0 OFFSET B = 2
OFFSET A = 1 OFFSET C = 3

COMM ADDRESS:
(C/0 + 0 + 0) = 10

ZONE NUMBER:
(C/0 + 0 + 1) = 1

AREA NUMBER:
(C/0 + 0 + 2) = 2

AREA ADDRESS:
(C/0 + 0 + 3) = 181

EXCL. PED. OPERATION:
WALK: (F/1+0+0) = 0
DONT WALK: (F/1+0+1) = 0
RED CLEAR: (F/1+0+2) = 0.0

EXTRA 1
1 = TBC Type 1
2 = NEMA External Coordinator
3 = Auto Daylight Savings
4 = EV Preempt Advance
5 = Expanded Status Report
6 = International Ped.
7 = Clear Outputs During Flash
8 = Split Ring Operation

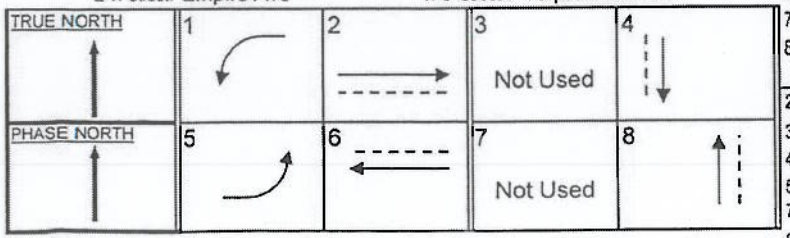
IC SELECT
2 = 2 Way Modem
3 = 7 Wire Slave
4 = Flash/Free
5 = Simplex Master
7 = 7 Wire Master
8 = Offset Interruptor

CONTROLLER CONFIGURATION FLAGS

	Column E		Column F		EXTRA 2
0	EXCLUSIVE				1 = AWB On during Phase Initial
1	RR 1 CLEAR		1 EXT PERMIT 1		
2	RR 2 CLEAR		2 EXT PERMIT 2		2 = LMU installed
3	RR 2 LTD SRV		3 EXCLU PED		
4	PROT/PERM	1___5___	4		FLASH TO PREMPT
5	FLH TO PREMT		5 PED 2 P OUT	2	1 = EV A
6	FLASH ENTRY		6 PED 6 P OUT	6	2 = EV B
7	DSABL MIN YEL		7 PED 4 P OUT	4	3 = EV C
8	DSABL OVP YEL		8 PED 8 P OUT	8	4 = EV D
9	OVP FLH YEL		9 FLH YELLOW		5 = RR 1
A	EM. VEH. A		A		6 = RR2
B	EM. VEH. B		B		7 = SE 1
C	EM. VEH. C		C		8 = SE 2
D	EM. VEH. D		D		
E	EXTRA 1	1_3_5___	E RESTRICTED		
F	IC SELECT	2	F EXTRA 2		

< C + 0 + E = 125 > < C + 0 + E = 125 >

PHASE DIAGRAM
E-W Street: Empire Ave N-S Street : Valpreda Street



CITY OF BURBANK
PUBLIC WORKS DEPARTMENT
Traffic Engineering Division

TRAFFIC SIGNAL
Coordination Timing

281 Empire Ave & Valpreda St			
Prepared by:	STEPHEN DOMENICO	Date	02/09/09
Checked by:	BENJAMIN KIM	Date	02/12/09

		PLAN NUMBER 1	2	3	4	5	6	7	8	9
0	CYCLE	90	90	90	0	0	0	0	0	0
1	FORCE 1	60	60	60	0	0	0	0	0	0
2	FORCE 2	0	0	0	0	0	0	0	0	0
3	FORCE 3	0	0	0	0	0	0	0	0	0
4	FORCE 4	35	35	35	0	0	0	0	0	0
5	FORCE 5	50	50	50	0	0	0	0	0	0
6	FORCE 6	0	0	0	0	0	0	0	0	0
7	FORCE 7	0	0	0	0	0	0	0	0	0
8	FORCE 8	35	35	35	0	0	0	0	0	0
9	RING OFFSET	0	0	0	0	0	0	0	0	0
A	OFFSET 1	0	0	0	0	0	0	0	0	0
B	OFFSET 2	0	0	0	0	0	0	0	0	0
C	OFFSET 3	0	0	0	0	0	0	0	0	0
D	END PERM 1	15	15	15	0	0	0	0	0	0
E	HOLD RELEASE	255	255	255	0	0	0	0	0	0
F	ZONE OFFSET	0	0	0	0	0	0	0	0	0

< C + 0 + C = 1 >

		COLUMN E 1	2	3	4	5	6	7	8
0									
1	SYNC Plan		2				6		
2	SYNC Plan		2				6		
3	SYNC Plan		2				6		
4	SYNC Plan		2				6		
5	SYNC Plan		2				6		
6	SYNC Plan		2				6		
7	SYNC Plan		2				6		
8	SYNC Plan		2				6		
9	SYNC Plan		2				6		
A	NEMA SYN								
B	NEMA HOL								
C									
D									
E	COORD EX								
F									

< C + 0 + C = 1 >

		COLUMN F 1	2	3	4	5	6	7	8
0	LAG FREE		2		4		6		8
1	LAG PLAN		2		4		6		8
2	LAG PLAN		2		4		6		8
3	LAG PLAN		2		4		6		8
4	LAG PLAN		2		4		6		8
5	LAG PLAN		2		4		6		8
6	LAG PLAN		2		4		6		8
7	LAG PLAN		2		4		6		8
8	LAG PLAN		2		4		6		8
9	LAG PLAN		2		4		6		8
A	EXT. LAG								
B									
C									
D									

COORDINATION EXTRA:
1- Programmed Walk Time for SYNC Phases

COLUMN 2 Coord Min.

1	10
2	20
3	0
4	10
5	10
6	20
7	0
8	10

< C + 0 + C = 5 >

DIAL UP"stand alone" MODEM INTERFACE.
NOTE: If "Non-Zero," parity will be DISABLED for "Smart Modem" Operation.
< C/5 +D+0 >= _____

TRANSITION TYPE:
< C/5 + 1 + 9 > = 0.3

0.X = SHORTWAY
1.X = DWELL
X.1 THRU X.4 = NUMBER OF CYCLES WHEN LENGTHENING

LAG HOLD PHASES:
< C/5 + 1 + A > = _____

7-WIRE SYNC TIME:
< C/5 + 1 + C > = _____

Low Priority Channel:
< E/125 + C + 8 > : _____
1 - Channel A
2 - Channel B
3 - Channel C
4 - Channel D

Daylight Savings Time

Begin Month	<C/5+2+A>	0
Begin Week	<C/5+2+B>	0
End Month	<C/5+2+C>	0
End Week	<C/5+2+D>	0

Plan # -->	1	2	3	4	5	6	7	8	9	
0 PED ADJUST	0	0	0	0	0	0	0	0	0	0
1 STRT PERM 2	0	0	0	0	0	0	0	0	0	1
2 END PERM 2	0	0	0	0	0	0	0	0	0	2
3 STRT PERM 3	0	0	0	0	0	0	0	0	0	3
4 END PERM 3	0	0	0	0	0	0	0	0	0	4
5 RSERVE TIME	0	0	0	0	0	0	0	0	0	5
	1 2 3 4 5 6 7 8									
6 RSERVE PH	_ _ _ _ _ _ _ _									6
7										7
8 PRETIMED	_ _ _ _ _ _ _ _									8
9 MAX RECALL	_ _ _ _ _ _ _ _									9
A PERM 1 VEH	1 2 3 4 5 6 7 8									A
B PERM 1 PED	1 2 3 4 5 6 7 8									B
C PERM 2 VEH	_ _ _ _ _ _ _ _									C
D PERM 2 PED	_ _ _ _ _ _ _ _									D
E PERM 3 VEH	_ _ _ _ _ _ _ _									E
F PERM 3 PED	_ _ _ _ _ _ _ _									F

COORDINATION PAGE 2 < C + 0 + C = 2 >

Advance Warning Beacon - Sign 1

Time Before Yellow	<F/1+C+E>	0.0
Phase Number	<F/1+C+F>	0

Advance Warning Beacon - Sign 2

Time Before Yellow	<F/1+D+E>	0.0
Phase Number	<F/1+D+F>	0

Min Green Before PE Force Off

Min Time, sec.	<F/1+0+8>	0

Max Preemt Time Before Failure

Max Time, min.	<F/1+0+9>	255

Min Time Bet.Same Preempts
(Does Not Apply To Railroad Preempt)

Min Time, sec.	<F/1+0+A>	0

CITY OF BURBANK
PUBLIC WORKS DEPARTMENT
Traffic Engineering Division

TRAFFIC SIGNAL
Phase Timing

Prepared by: STEPHEN DOMENICO		Date 02/09/09
Checked by: BENJAMIN KIM		Date 02/10/09
Approved by: KEN JOHNSON		Date 2/12/09
Completed by:		Date 2/17/09

280 Empire & Lincoln
(Intersection Name)

NOTES:

	Interval	PHASE 1	2	3	4	5	6	7	8
0	WALK	0	7	0	7	0	7	0	7
1	DONT WALK	0	16	0	18	0	16	0	16
2	MIN INITIAL	4	10	0	4	4	10	0	4
3	TYPE 3 LIMIT	0	20	0	0	0	20	0	0
4	ADD PER VEH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	VEH EXT	2.0	4.0	0.0	3.0	2.0	4.0	0.0	3.0
6	MAX GAP	2.0	6.0	0.0	3.0	2.0	6.0	0.0	3.0
7	MIN GAP	2.0	2.0	0.0	3.0	2.0	2.0	0.0	3.0
8	MAX LIMIT	25	40	0	35	25	40	0	35
9	MAXIMUM 2	25	40	0	35	25	40	0	35
A	ADV/DLY WLK	0	0	0	0	0	0	0	0
B	MIN PED CLR	0	0	0	0	0	0	0	0
C	COND SRV MIN	0	0	0	0	0	0	0	0
D	REDUCE EVERY	0.0	1.0	0.0	0.0	0.0	1.0	0.0	0.0
E	YELLOW	3.5	4.0	0.0	3.5	3.5	4.0	0.0	3.5
F	RED CLEAR	1.0	2.0	0.0	1.0	1.0	2.0	0.0	1.0

PHASE BANK 1 < C + 0 + F = 1 >

		ALTERNATE TIMING 9	A	B	C	D
1	Ph. 1	0	0	0	0	0
2	Ph. 2	0	0	0	0	0
3	Ph. 3	0	0	0	0	0
4	Ph. 4	0	0	0	0	0
5	Ph. 5	0	0	0	0	0
6	Ph. 6	0	0	0	0	0
7	Ph. 7	0	0	0	0	0
8	Ph. 8	0	0	0	0	0
		Maximum Initial	Alternate Walk	Alternate FDW	Alternate Initial	Alternate Extension

ALL RED START: <F/ + C + 0> = 6.0
RED REVERT: <F/ 1 + 0 + F> = 3.0
FLASH START: <F/ 1 + 0 + E> = 0.0

PREEMPT		E
RR1 DLY	0	
RR1 CLR	0	
EVA DLY	0	
EVA CLR	0	
EVB DLY	0	
EVB CLR	0	
EVC DLY	0	
EVC CLR	0	
EVD DLY	0	
EVD CLR	0	
RR2 DLY	0	
RR2 CLR	0	
EV CLR		
EV DLY		
RR CLR		
RR DLY		

PHASE FUNCTION FLAGS
Column F

0	PERMIT	12_456_8
1	RED LOCK	
2	YELLOW LOCK	
3	VEH MIN CALL	_2___6__
4	PED RECALL	_2___6__
5	PEDESTRIANS	
6	REST IN WALK	
7	RED REST	
8	DOUBLE ENTRY	___4___8
9	VEH MAX CALL	
A	SOFT RECALL	
B	MAXIMUM 2	
C	COND SERVICE	
D	MAN CONT CALL	
E	YELLOW START	
F	FIRST PHASES	2 6

< C + 0 + F = 1 >

SPECIALS
Column F

0	FAST GRN FLH	
1	GREEN FLSH	
2	FLASH WALK	
3	GUAR PASS	
4	SIMUL GAP	
5	SEQ TIMING	
6	ADV WALK	
7	DELAY WALK	
8	EXT RECALL	
9		
A	MAX EXTEN	
B	INH PED RSRV	
C	SEMI ACTUA.	
D	O'LAP STRT UP	
E	STRT VEH CALL	12_456_8
F	STRT PED CALL	2_4_6_8

Specials <C + 0 + F = 2>

Controller Intervals
0 = Walk
1 = FDW
2 = MIN. Green
3 =
4 = Var. Initial
5 = Extension
6 =
7 = Reduce Gap
8 = Red Rest
9 = Preempt
A = Stop Time
B = Red Revrt
C = Gap Term.
D = MAX Term.
E = Forceoff
F = Red Clear.

INPUT KEYSTROKES:
1) Set PAGE to required BANK #
< C+0+PAGE = BANK # >
2) Key stroke: PAGE + COLUMN + ROW

To Enable "E" Page, Set < F/1 + 9 + E = Not Zero >

MANUAL PLAN SELECT:
(C/0 + A + 1) = 0
AUTO = 0 FREE = 14
PLAN = 1 - 9 FLASH= 15

MANUAL OFFSET SELECT:
(C/0 + B + 1) = 0
AUTO = 0 OFFSET B = 2
OFFSET A = 1 OFFSET C = 3

COMM ADDRESS:
(C/0 + 0 + 0) = 9

ZONE NUMBER:
(C/0 + 0 + 1) = 1

AREA NUMBER:
(C/0 + 0 + 2) = 2

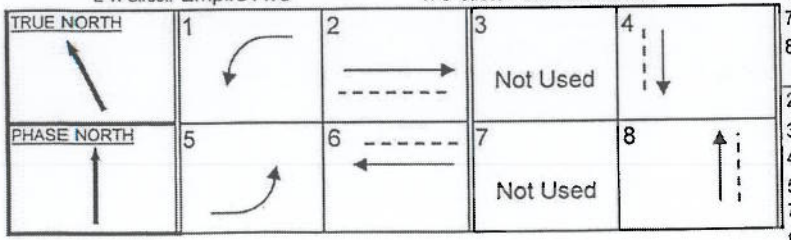
AREA ADDRESS:
(C/0 + 0 + 3) = 180

EXCL. PED. OPERATION:
WALK:
(F/1+0+0) = 0
DONT WALK:
(F/1+0+1) = 0
RED CLEAR:
(F/1+0+2) = 0.0

EXTRA 1
1 = TBC Type 1
2 = NEMA External Coordinator
3 = Auto Daylight Savings
4 = EV Preempt Advance
5 = Expanded Status Report
6 = International Ped.
7 = Clear Outputs During Flash
8 = Split Ring Operation

IC SELECT
2 = 2 Way Modem
3 = 7 Wire Slave
4 = Flash/Free
5 = Simplex Master
7 = 7 Wire Master
8 = Offset Interruptor

PHASE DIAGRAM
E-W Street: Empire Ave N-S Street: Lincoln Street



CONTROLLER CONFIGURATION FLAGS

		Column E	Column F
0	EXCLUSIVE		
1	RR 1 CLEAR		EXT PERMIT 1
2	RR 2 CLEAR		EXT PERMIT 2
3	RR 2 LTD SRV		EXCLU PED
4	PROT/PERM	1___5___	
5	FLH TO PREMT		PED 2 P OUT _2_____
6	FLASH ENTRY		PED 6 P OUT ____6__
7	DSABL MIN YEL		PED 4 P OUT ___4____
8	DSABL OVP YEL		PED 8 P OUT _____8
9	OVP FLH YEL		FLH YELLOW
A	EM. VEH. A		
B	EM. VEH. B		
C	EM. VEH. C		
D	EM. VEH. D		
E	EXTRA 1	1_3_5___	RESTRICTED
F	IC SELECT	2	EXTRA 2

< C + 0 + E = 125 > < C + 0 + E = 125 >

EXTRA 2
1 = AWB On during Phase Initial
2 = LMU installed

FLASH TO PREMPT
1 = EV A
2 = EV B
3 = EV C
4 = EV D
5 = RR 1
6 = RR2
7 = SE 1
8 = SE 2

CITY OF BURBANK
PUBLIC WORKS DEPARTMENT
Traffic Engineering Division

TRAFFIC SIGNAL
Coordination Timing

280 Empire & Lincoln			
Prepared by:	STEPHEN DOMENICO	Date	02/09/09
Checked by:	BENJAMIN KIM	Date	02/11/09

		PLAN NUMBER 1	2	3	4	5	6	7	8	9
0	CYCLE	90	90	90	0	0	0	0	0	0
1	FORCE 1	60	60	60	0	0	0	0	0	0
2	FORCE 2	0	0	0	0	0	0	0	0	0
3	FORCE 3	0	0	0	0	0	0	0	0	0
4	FORCE 4	35	35	35	0	0	0	0	0	0
5	FORCE 5	50	50	50	0	0	0	0	0	0
6	FORCE 6	0	0	0	0	0	0	0	0	0
7	FORCE 7	0	0	0	0	0	0	0	0	0
8	FORCE 8	35	35	35	0	0	0	0	0	0
9	RING OFFSET	0	0	0	0	0	0	0	0	0
A	OFFSET 1	0	0	0	0	0	0	0	0	0
B	OFFSET 2	0	0	0	0	0	0	0	0	0
C	OFFSET 3	0	0	0	0	0	0	0	0	0
D	END PERM 1	15	15	15	0	0	0	0	0	0
E	HOLD RELEASE	255	255	255	0	0	0	0	0	0
F	ZONE OFFSET	0	0	0	0	0	0	0	0	0

< C + 0 + C = 1 >

		COLUMN E 1 2 3 4 5 6 7 8		COLUMN F 1 2 3 4 5 6 7 8
0			0 LAG FREE	_2_4_6_8
1	SYNC Plar	_2_____6___	1 LAG PLAN	_2_4_6_8
2	SYNC Plar	_2_____6___	2 LAG PLAN	_2_4_6_8
3	SYNC Plar	_2_____6___	3 LAG PLAN	_2_4_6_8
4	SYNC Plar	_2_____6___	4 LAG PLAN	_2_4_6_8
5	SYNC Plar	_2_____6___	5 LAG PLAN	_2_4_6_8
6	SYNC Plar	_2_____6___	6 LAG PLAN	_2_4_6_8
7	SYNC Plar	_2_____6___	7 LAG PLAN	_2_4_6_8
8	SYNC Plar	_2_____6___	8 LAG PLAN	_2_4_6_8
9	SYNC Plar	_2_____6___	9 LAG PLAN	_2_4_6_8
A	NEMA SYN		A EXT. LAG	
B	NEMA HOL		B	
C			C	
D			D	
E	COORD EX			
F				

< C + 0 + C = 1 >

COORDINATION EXTRA:
1- Programmed Walk Time for SYNC Phases

COLUMN 2 Coord Min.

1	10
2	20
3	0
4	10
5	10
6	20
7	0
8	10

< C + 0 + C = 5 >

DIAL UP"stand alone" MODEM INTERFACE.
NOTE: If "Non-Zero," parity will be DISABLED for "Smart Modem" Operation.
< C/5 +D+0 >= ____

TRANSITION TYPE:
< C/5 + 1 + 9 > = 0.3

0.X = SHORTWAY
1.X = DWELL
X.1 THRU X.4 = NUMBER OF CYCLES WHEN LENGTHENING

LAG HOLD PHASES:
< C/5 + 1 + A > = ____

7-WIRE SYNC TIME:
< C/5 + 1 + C > = ____

Low Priority Channel:
< E/125 + C + 8 > : ____
1 - Channel A
2 - Channel B
3 - Channel C
4 - Channel D

Daylight Savings Time

Begin Month	<C/5+2+A>	0
Begin Week	<C/5+2+B>	0
End Month	<C/5+2+C>	0
End Week	<C/5+2+D>	0

Plan # -->		1	2	3	4	5	6	7	8	9	
0	PED ADJUST	0	0	0	0	0	0	0	0	0	0
1	STRT PERM 2	0	0	0	0	0	0	0	0	0	1
2	END PERM 2	0	0	0	0	0	0	0	0	0	2
3	STRT PERM 3	0	0	0	0	0	0	0	0	0	3
4	END PERM 3	0	0	0	0	0	0	0	0	0	4
5	RSERVE TIME	0	0	0	0	0	0	0	0	0	5
		1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	
6	RSERVE PH	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	6
7											7
8	PRETIMED	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	8
9	MAX RECALL	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	9
A	PERM 1 VEH	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	A
B	PERM 1 PED	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	B
C	PERM 2 VEH	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	C
D	PERM 2 PED	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	D
E	PERM 3 VEH	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	E
F	PERM 3 PED	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _	F

COORDINATION PAGE 2 < C + 0 + C = 2 >

Advance Warning Beacon - Sign 1

Time Before Yellow	<F/1+C+E>	0.0
Phase Number	<F/1+C+F>	0

Advance Warning Beacon - Sign 2

Time Before Yellow	<F/1+D+E>	0.0
Phase Number	<F/1+D+F>	0

Min Green Before PE Force Off

Min Time, sec.	<F/1+0+8>	0

Max Preemt Time Before Failure

Max Time, min.	<F/1+0+9>	255

Min Time Bet.Same Preempts
(Does Not Apply To Railroad Preempt)

Min Time, sec.	<F/1+0+A>	0

CITY OF BURBANK
PUBLIC WORKS DEPARTMENT
Traffic Engineering Division

TRAFFIC SIGNAL
Phase Timing

Prepared by: STEPHEN DOMENICO	Date 02/09/09
Checked by: BENJAMIN KIM	Date 02/12/09
Approved by: KEN JOHNSON	Date 2/12/09
Completed by:	Date 2/17/09

279 Empire Ave & Victory Pl
(Intersection Name)

NOTES:

	Interval	PHASE 1	2	3	4	5	6	7	8
0	WALK	0	7	0	0	0	0	0	0
1	DONT WALK	0	20	0	0	0	0	0	0
2	MIN INITIAL	4	7	0	0	0	7	0	4
3	TYPE 3 LIMIT	0	20	0	0	0	20	0	0
4	ADD PER VEH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	VEH EXT	2.0	4.0	0.0	0.0	0.0	4.0	0.0	3.0
6	MAX GAP	2.0	5.0	0.0	0.0	0.0	5.0	0.0	3.0
7	MIN GAP	2.0	3.0	0.0	0.0	0.0	3.0	0.0	3.0
8	MAX LIMIT	20	40	0	0	0	40	0	35
9	MAXIMUM 2	20	40	0	0	0	40	0	35
A	ADV/DLY WLK	0	0	0	0	0	0	0	0
B	MIN PED CLR	0	0	0	0	0	0	0	0
C	COND SRV MIN	0	0	0	0	0	0	0	0
D	REDUCE EVERY	0.0	1.0	0.0	0.0	0.0	1.0	0.0	0.0
E	YELLOW	3.5	4.0	0.0	0.0	0.0	4.0	0.0	4.0
F	RED CLEAR	0.5	2.0	0.0	0.0	0.0	2.0	0.0	0.5

PHASE BANK 1 **< C + 0 + F = 1 >**

		ALTERNATE TIMING 9	A	B	C	D
1	Ph. 1	0	0	0	0	0
2	Ph. 2	0	0	0	0	0
3	Ph. 3	0	0	0	0	0
4	Ph. 4	0	0	0	0	0
5	Ph. 5	0	0	0	0	0
6	Ph. 6	0	0	0	0	0
7	Ph. 7	0	0	0	0	0
8	Ph. 8	0	0	0	0	0
		Maximum Initial	Alternate Walk	Alternate FDW	Alternate Initial	Alternate Extension

ALL RED START: <F/ + C + 0> = 6.0
RED REVERT: <F/ 1 + 0 + F> = 3.0
FLASH START: <F/ 1 + 0 + E> = 0.0

PREEMPT		E
RR1 DLY	0	
RR1 CLR	0	
EVA DLY	0	
EVA CLR	0	
EVB DLY	0	
EVB CLR	0	
EVC DLY	0	
EVC CLR	0	
EVD DLY	0	
EVD CLR	0	
RR2 DLY	0	
RR2 CLR	0	
EV CLR		
EV DLY		
RR CLR		
RR DLY		

PHASE FUNCTION FLAGS
Column F

0	PERMIT	12 6 8
1	RED LOCK	
2	YELLOW LOCK	
3	VEH MIN CALL	2 6
4	PED RECALL	2
5	PEDESTRIANS	
6	REST IN WALK	
7	RED REST	
8	DOUBLE ENTRY	
9	VEH MAX CALL	
A	SOFT RECALL	
B	MAXIMUM 2	
C	COND SERVICE	
D	MAN CONT CALL	
E	YELLOW START	
F	FIRST PHASES	2 6

< C + 0 + F = 1 >

SPECIALS
Column F

0	FAST GRN FLH	
1	GREEN FLSH	
2	FLASH WALK	
3	GUAR PASS	
4	SIMUL GAP	
5	SEQ TIMING	
6	ADV WALK	
7	DELAY WALK	
8	EXT RECALL	
9		
A	MAX EXTEN	
B	INH PED RSRV	
C	SEMI ACTUA.	
D	O'LAP STRT UP	
E	STRT VEH CALL	12 6 8
F	STRT PED CALL	2

Specials <C + 0 + F = 2>

Controller Intervals
0 = Walk
1 = FDW
2 = MIN. Green
3 =
4 = Var. Initial
5 = Extension
6 =
7 = Reduce Gap
8 = Red Rest
9 = Preempt
A = Stop Time
B = Red Revrt
C = Gap Term.
D = MAX Term.
E = Forceoff
F = Red Clear.

INPUT KEYSTROKES:
1) Set PAGE to required BANK #
< C+0+PAGE = BANK # >
2) Key stroke: PAGE + COLUMN + ROW

To Enable "E" Page, Set < F/1 + 9 + E = Not Zero >

MANUAL PLAN SELECT:
(C/0 + A + 1) = 0
AUTO = 0 FREE = 14
PLAN = 1 - 9 FLASH= 15

MANUAL OFFSET SELECT:
(C/0 + B + 1) = 0
AUTO = 0 OFFSET B = 2
OFFSET A = 1 OFFSET C = 3

COMM ADDRESS:
(C/0 + 0 + 0) = 11

ZONE NUMBER:
(C/0 + 0 + 1) = 1

AREA NUMBER:
(C/0 + 0 + 2) = 2

AREA ADDRESS:
(C/0 + 0 + 3) = 179

EXCL. PED. OPERATION:
WALK: (F/1+0+0) = 0
DONT WALK: (F/1+0+1) = 0
RED CLEAR: (F/1+0+2) = 0.0

EXTRA 1
1 = TBC Type 1
2 = NEMA External Coordinator
3 = Auto Daylight Savings
4 = EV Preempt Advance
5 = Expanded Status Report
6 = International Ped.
7 = Clear Outputs During Flash
8 = Split Ring Operation

IC SELECT
2 = 2 Way Modem
3 = 7 Wire Slave
4 = Flash/Free
5 = Simplex Master
7 = 7 Wire Master
8 = Offset Interruptor

CONTROLLER CONFIGURATION FLAGS

		Column E	Column F
0	EXCLUSIVE		
1	RR 1 CLEAR		EXT PERMIT 1
2	RR 2 CLEAR		EXT PERMIT 2
3	RR 2 LTD SRV		EXCLU PED
4	PROT/PERM	1	
5	FLH TO PREMT		PED 2 P OUT 2
6	FLASH ENTRY		PED 6 P OUT
7	DSABL MIN YEL		PED 4 P OUT
8	DSABL OVP YEL		PED 8 P OUT
9	OVP FLH YEL		FLH YELLOW
A	EM. VEH. A		
B	EM. VEH. B		
C	EM. VEH. C		
D	EM. VEH. D		
E	EXTRA 1	1 3 5	RESTRICTED
F	IC SELECT	2	EXTRA 2

< C + 0 + E = 125 > **< C + 0 + E = 125 >**

EXTRA 2
1 = AWB On during Phase Initial
2 = LMU installed

FLASH TO PREMPT
1 = EV A
2 = EV B
3 = EV C
4 = EV D
5 = RR 1
6 = RR2
7 = SE 1
8 = SE 2

PHASE DIAGRAM

E-W Street: Empire Ave N-S Street: Victory Place

TRUE NORTH	1	2	3 Not Used	4 Not Used
PHASE NORTH	5 Not Used	6	7 Not Used	8

CITY OF BURBANK
PUBLIC WORKS DEPARTMENT
Traffic Engineering Division

TRAFFIC SIGNAL
Coordination Timing

279 Empire Ave & Victory Pl			
Prepared by:	STEPHEN DOMENICO	Date	02/09/09
Checked by:	BENJAMIN KIM	Date	02/12/09

		PLAN NUMBER								
		1	2	3	4	5	6	7	8	9
0	CYCLE	90	90	90	0	0	0	0	0	0
1	FORCE 1	55	55	55	0	0	0	0	0	0
2	FORCE 2	0	0	0	0	0	0	0	0	0
3	FORCE 3	0	0	0	0	0	0	0	0	0
4	FORCE 4	0	0	0	0	0	0	0	0	0
5	FORCE 5	0	0	0	0	0	0	0	0	0
6	FORCE 6	0	0	0	0	0	0	0	0	0
7	FORCE 7	0	0	0	0	0	0	0	0	0
8	FORCE 8	35	35	35	0	0	0	0	0	0
9	RING OFFSET	0	0	0	0	0	0	0	0	0
A	OFFSET 1	0	0	0	0	0	0	0	0	0
B	OFFSET 2	0	0	0	0	0	0	0	0	0
C	OFFSET 3	0	0	0	0	0	0	0	0	0
D	END PERM 1	15	15	15	0	0	0	0	0	0
E	HOLD RELEASE	255	255	255	0	0	0	0	0	0
F	ZONE OFFSET	0	0	0	0	0	0	0	0	0

< C + 0 + C = 1 >

		COLUMN E								COLUMN F							
		1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
0										0 LAG FREE	2		4		6		8
1	SYNC Plan		2				6			1 LAG PLAN	2		4		6		8
2	SYNC Plan		2				6			2 LAG PLAN	2		4		6		8
3	SYNC Plan		2				6			3 LAG PLAN	2		4		6		8
4	SYNC Plan		2				6			4 LAG PLAN	2		4		6		8
5	SYNC Plan		2				6			5 LAG PLAN	2		4		6		8
6	SYNC Plan		2				6			6 LAG PLAN	2		4		6		8
7	SYNC Plan		2				6			7 LAG PLAN	2		4		6		8
8	SYNC Plan		2				6			8 LAG PLAN	2		4		6		8
9	SYNC Plan		2				6			9 LAG PLAN	2		4		6		8
A	NEMA SYN									A EXT. LAG							
B	NEMA HOL									B							
C										C							
D										D							
E	COORD EX																
F																	

< C + 0 + C = 1 >

COORDINATION EXTRA:
1- Programmed Walk Time for SYNC Phases

COLUMN 2
Coord Min.

1	10
2	20
3	0
4	0
5	0
6	20
7	0
8	20

< C + 0 + C = 5 >

DIAL UP"stand alone" MODEM INTERFACE.
NOTE: If "Non-Zero," parity will be DISABLED for "Smart Modem" Operation.
< C/5 +D+0 >= _____

TRANSITION TYPE:
< C/5 + 1 + 9 > = 0.3

0.X = SHORTWAY
1.X = DWELL
X.1 THRU X.4 = NUMBER OF CYCLES WHEN LENGTHENING

LAG HOLD PHASES:
< C/5 + 1 + A > = _____

7-WIRE SYNC TIME:
< C/5 + 1 + C > = _____

Low Priority Channel:
< E/125 + C + 8 > : _____
1 - Channel A
2 - Channel B
3 - Channel C
4 - Channel D

Daylight Savings Time

Begin Month	<C/5+2+A>	0
Begin Week	<C/5+2+B>	0
End Month	<C/5+2+C>	0
End Week	<C/5+2+D>	0

Plan # -->		1	2	3	4	5	6	7	8	9	
0	PED ADJUST	0	0	0	0	0	0	0	0	0	0
1	STRT PERM 2	0	0	0	0	0	0	0	0	0	1
2	END PERM 2	0	0	0	0	0	0	0	0	0	2
3	STRT PERM 3	0	0	0	0	0	0	0	0	0	3
4	END PERM 3	0	0	0	0	0	0	0	0	0	4
5	RSERVE TIME	0	0	0	0	0	0	0	0	0	5
		1 2 3 4 5 6 7 8									
6	RSERVE PH	_ _ _ _ _ _ _ _									6
7											7
8	PRETIMED	_ _ _ _ _ _ _ _									8
9	MAX RECALL	_ _ _ _ _ _ _ _									9
A	PERM 1 VEH	1 2 3 4 5 6 7 8									A
B	PERM 1 PED	1 2 3 4 5 6 7 8									B
C	PERM 2 VEH	_ _ _ _ _ _ _ _									C
D	PERM 2 PED	_ _ _ _ _ _ _ _									D
E	PERM 3 VEH	_ _ _ _ _ _ _ _									E
F	PERM 3 PED	_ _ _ _ _ _ _ _									F

COORDINATION PAGE 2 < C + 0 + C = 2 >

Advance Warning Beacon - Sign 1

Time Before Yellow	<F/1+C+E>	0.0
Phase Number	<F/1+C+F>	0

Advance Warning Beacon - Sign 2

Time Before Yellow	<F/1+D+E>	0.0
Phase Number	<F/1+D+F>	0

Min Green Before PE Force Off

Min Time, sec.	<F/1+0+8>	0

Max Preemt Time Before Failure

Max Time, min.	<F/1+0+9>	255

Min Time Bet.Same Preempts
(Does Not Apply To Railroad Preempt)

Min Time, sec.	<F/1+0+A>	0

PLAY LIST

CITY OF BURBANK
PUBLIC WORKS DEPARTMENT
MEMORANDUM

DATE: December 2, 2010

TO: Michael Flad, City Manager

FROM: Bonnie Teaford, Public Works Director
By: Kenneth Johnson, Traffic Engineer

SUBJECT: PLAYLIST ITEM NO. 1295- Traffic Signal Operation Near Shopping Centers During the Holiday Period

City Council requested information on traffic signal operation during the holiday period.

DISCUSSION:

Shopping center trip generation can average 25 to 40 percent higher during the holiday season than during an average weekday, and peak demand can be as much as three times normal[1]. The holiday traffic demand on roadways adjacent to shopping areas requires a highly flexible traffic control system, and our fully actuated system is very flexible. During the holiday period, staff monitors the signal timing of critical intersections and makes adjustments as necessary to maintain optimum operation.

Burbank has two major shopping areas, the Empire Center including COSTCO and the Media Center Mall with IKEA. The most heavily impacted intersections during the holidays are Five Points (Burbank Boulevard / Victory Boulevard), Burbank Boulevard / San Fernando Boulevard, and to a lesser extent Buena Vista Street / San Fernando Boulevard The adjacent traffic signals in these commercial areas are coordinated with a common signal cycle length so that the intersections operate in unison.

The coordinated traffic signal systems adjacent to our shopping centers are illustrated in Attachment 1. Staff initially tried to coordinate all signals in one system, but the Five Points signal prevented effective coordination during the peak travel hours. Staff determined that three separate interconnected systems would operate most efficiently with the varied traffic demand in the system. All the traffic signals are fully actuated which allows variable green times on each approach. Green signal time for the through movements generally vary between a minimum of 10 seconds to a maximum of about 50 seconds, depending on the approach, and left turn green time varies between 4 seconds and about 25 seconds. Green signal time within the minimum and maximum time limits will vary based on the actual traffic demand at that time. Coordination between signals is achieved by terminating side street green at the proper time to coordinate the start of main street green at each signal.

[1] Trip Generation, 7th Edition, Institute of Transportation Engineers,2003

The three signals adjacent to Five Points are driven by the Five Points signal, so that the entire signal cluster is coordinated with the variable operation of the Five Points signal. The Five Points signal cycle length varies between 90 seconds and 250 seconds, depending on the traffic demand at the intersection. The two minor traffic signals that serve COSTCO (at Lake Street and at the COSTCO driveway) operate at a double cycle when the Five Points signal has a long signal cycle length. That is, these signals cycle through twice for every one Five Points signal cycle.

The seven signal cluster adjacent to the primary traffic signal at San Fernando Boulevard and Burbank Boulevard similarly are coordinated with the primary signal at this main intersection. Cycle length varies between 90 seconds and 180 seconds based on traffic demand at the main San Fernando Boulevard / Burbank Boulevard intersection. Minimum and maximum green times are similar to those at the Five Points intersections.

The six traffic signals on Empire Avenue and Victory Place are coordinated with the traffic signals on Buena Vista Street and the cycle length of these signals is driven by the signal at Buena Vista Street and Empire Avenue. Actuated minimum and maximum green times are similar to those of the other traffic signal clusters, and the cycle lengths vary between 90 seconds and 106 seconds.

The above three signal clusters and their timing parameters were identified from observation of the traffic demand and the testing of various operational scenarios. The current operation provides the best signal coordination for the area with the highest degree of flexibility to account for the variable traffic demand. These operational systems provide the best service year round.

When defining the three coordinated systems, staff had to acknowledge three major operational constraints at the critical intersections.

Coordination - The signal coordination could not be extended across the Burbank Boulevard Bridge because coordination resulted in extensive traffic backup on the southbound I-5 off ramp and the northbound I-5 right turn off ramp when the Five Points signal operated at a long signal cycle. The two systems at either end of the bridge had such different demand characteristics that it is impossible to coordinate the entire group without impacting the freeway. Staff is currently evaluating the possibility of coordinating the two clusters during off peak time periods to smooth the traffic flow across the bridge. Off peak coordination should not cause freeway backups and it will move traffic more efficiently.

The Empire Avenue cluster of signals has a much more normal demand distribution so that it operates much better as a coordinated separate signal cluster. Staff has had to adjust timing on some Empire Avenue signals during the holiday season to provide more exiting green signal time, and these signals operate with minimal congestion.

Five Points - The most congested intersection in Burbank is the Five Points intersection. It reaches capacity periodically throughout the year. The trigger for the at-capacity operation is the entrance to COSTCO from Victory Boulevard to the parking lot and to the gasoline station. This one lane entrance backs on to Victory Boulevard from de-parking and waiting vehicles on COSTCO property. The traffic stream over the Burbank Boulevard Bridge backs up and continuously activates the vehicle detectors in the roadway. That condition extends the Burbank green to maximum during every signal cycle and shortens the green for other approaches. Additionally, the right turn lane

becomes blocked so that vehicles cannot use Victory Place to access the secondary entrance to COSTCO. When the traffic signal operates at the maximum signal cycle and all approaches are full, no adjustment of the traffic signal timing will help the situation. This intersection was evaluated by Albert Grover and Associates, who came to the same conclusion that no improvement was possible during peak, at-capacity periods with existing demand.

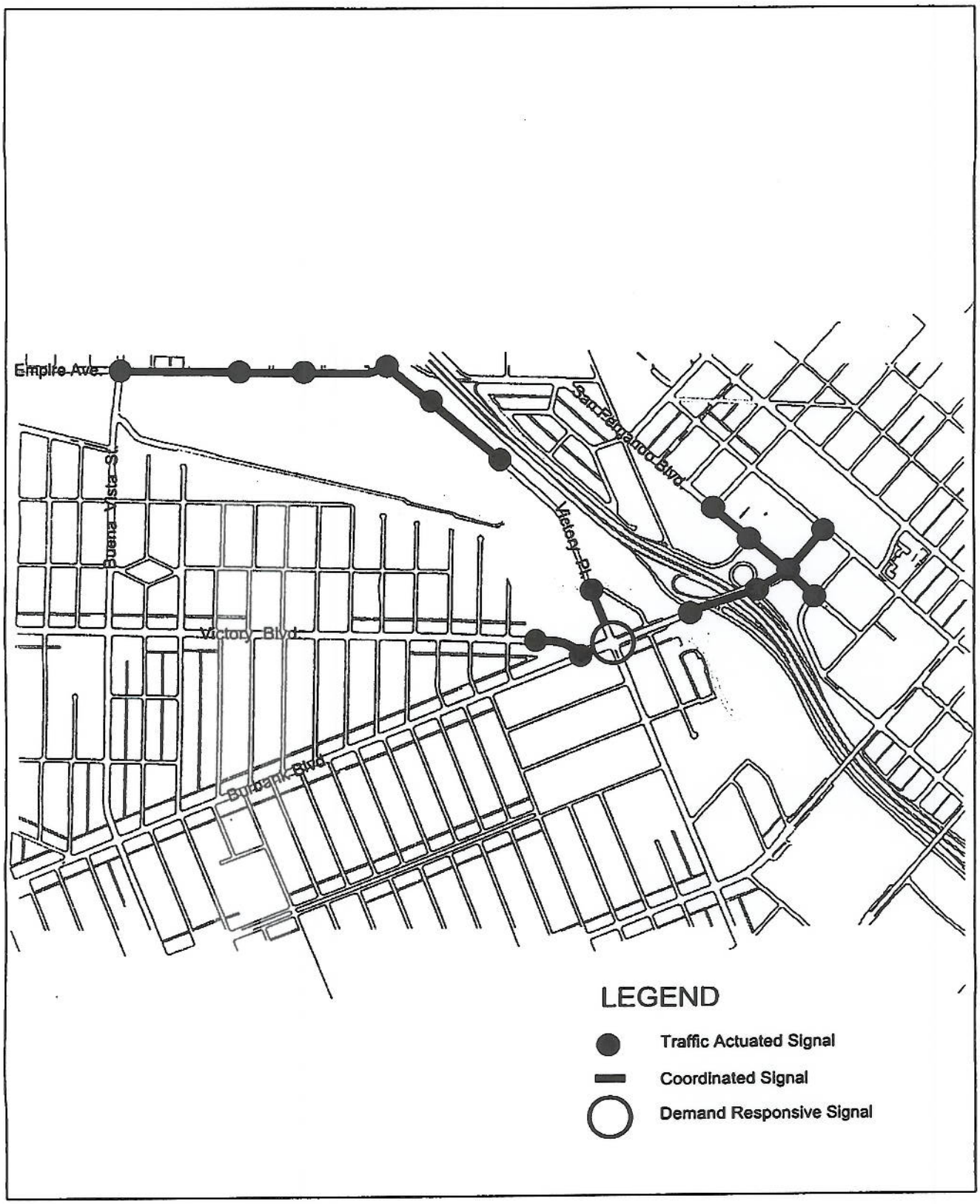
Burbank Media Mall – The main 5,000 space garage is located between San Fernando Boulevard and First Street. Congestion in the garage as well as pedestrian activity across the private portion of San Fernando Boulevard backs traffic to north of the Burbank Boulevard intersection. Drivers desiring to visit the mall have no alternative route to the parking if they arrive by the freeway and Burbank Boulevard. Traffic at the Burbank Boulevard / San Fernando Boulevard intersection is prevented from clearing the intersection with the maximum amount of green time provided, but the signal cycle cannot be extended beyond 180 seconds because of the close proximity of the ramp signal, the First Street signal, and the signal at Walnut St. However, the duration of maximum congestion at this location is considerably shorter than at Five Points.

CONCLUSIONS:

Congestion cannot be reduced at the critical signalized intersections without increasing capacity or reducing demand. The proposed road improvement on the west corner of Burbank Boulevard and San Fernando Boulevard will improve the condition considerably at this location. Additional southbound lanes will be created and the intersection will be widened. Congestion will still occur from parking and pedestrian activities in the mall, but the impact will be decreased.

Construction of the Empire Avenue interchange will significantly improve the access to the Empire Center and provide a new access to COSTCO from the north. Additionally, the widening of the Burbank Boulevard Bridge with the I-5 widening project will enable extension of the westbound right turn lane to Victory Place which will unclog the right turning traffic. The widening will allow the installation of a separate right turn lane to facilitate access to the secondary entrance to COSTCO.

cc. Jacqui Batayneh
Krista Dietrich



Attachment 1

Coordinated Signal Systems

SignalMap.dwg

TRAFFIC COMMISSION REPORT
December 16, 2010

Item VD

TRAFFIC ISSUES AT BURROUGHS HIGH SCHOOL

ISSUE:

At the November Traffic Commission meeting, several members of the public as well as Mr. Emilio Urioste, Principal of John Burroughs High School (JBHS), requested the committee investigate the traffic safety around John Burroughs High School. During this public comments period several suggestions for changes in traffic controls were made, including:

1. Addition of a three-way stop at Lamer Street and Clark Avenue with flashing lights,
2. Creation of a one-way couplet on Parish Place (southbound), and Keystone Street (northbound) between Verdugo Avenue and Clark Street,
3. Installation of fencing or barriers along Clark Avenue,
4. Addition of left or right turn lanes on Lamer Street approaching Clark Avenue, and
5. Addition of street lighting on Clark Avenue.

BACKGROUND:

At the June 2010 Traffic Commission meeting, staff addressed a series of concerns which were raised by John Burroughs School administration and the School Site Council. A copy of the June agenda item is attached (Attachment 1) for reference. Some of the concerns voiced at that time are the same issues brought up at the November 2010 meeting.

Several months ago, the City Council directed the Traffic Commission to establish a School Safety Subcommittee. The Traffic Commission established the Subcommittee to meet with School PTA's and Principals to discuss any traffic related issues the schools may have and to bring those back to the Traffic Commission for further discussion and recommendation. At their June 2010 meeting, the Traffic Commission referred this issue to the School Safety Subcommittee for review.

City staff (Traffic, Police Department and Community Development) also met with John Burroughs Site Council on December 6th to clarify some of the above requests.

Any Traffic Commission recommendations regarding Burroughs traffic controls will be evaluated by traffic staff. Any recommendations that do not meet established criteria for the installation of such controls will require City Council approval.

DISCUSSION:

Item 1- Install a Three-Way Stop at Lamer Street and Clark Avenue, and add flashing lights. In June 2010, staff conducted an extensive traffic study at this location, which revealed that a three-way stop is not warranted. The reported accidents at this intersection for the previous four years indicated only one accident (two cars traveling westbound, and the front car making a U-turn and being rear ended). During the investigation, traffic counts were collected for all three directions, as well as a speed survey on Clark Avenue. The speed survey showed 85th percentile speed of 27 MPH in a 25 MPH zone. Therefore, Traffic Engineering/Public Works Department did not recommend any additional stop signs at this intersection, as is the department's policy not to install any traffic control device if it is not warranted and/or justified. In regard to the flashing lights or embedded lighting, the California Manual on Uniform Traffic Control Devices (MUTCD) only requires these types of devices if the intersection is on a high speed arterial street with a high rate of accidents, which does not apply to this intersection.

Item 2- A One-Way couplet on Parish Place (southbound), and Keystone Street (northbound) between Verdugo Avenue and Clark Avenue. These two residential streets have 20 single family units on each block. They are also part of the city street system serving other residences and businesses in the area. Any major changes, such as a proposed one-way couplet, will have significant impact to the surrounding street system (please see Attachment 2). This request will require a traffic study to establish the impact boundary of the proposal and the impacted streets within the boundary, potential mitigation measures to the impacted streets, and funding mechanisms for the mitigation. The proposal will also require an outreach program to identify resident concerns about the one-way system.

Item 3- Fencing or barriers along Clark Street. The Site Council clarified a school request to have some sort of barrier along the middle of Clark Avenue between Parish Place and Lamer Street and at the Lamer Street and Keystone Street intersections with Clark Avenue. The purpose of this request is to discourage jaywalking between the intersections. It is proposed to install an approximately 4ft wide median island with 4ft high wrought iron fence along the center. Clark Street is a 36ft roadway with one travel lane and parking in each direction. Any median island installation will require the street to be widened to keep existing lanes and parking, or the complete elimination of parking on one side of the street.

Item 4- Add Left or Right Turn lanes on Lamer Street southbound approaching Clark Avenue. Lamer Street is 36ft wide, with two lanes of traffic and on-street parking on each side. Any additional turn lanes at Clark Avenue will require removal of on-street parking which is not desirable. Restricting left turn movements at this intersection to ease traffic flow during school rush-hours may be possible, but such changes must be addressed with the affected neighborhood. Such restrictions will be difficult to enforce.

Item 5- Clark Avenue is a dark street and is not well lighted at night. Burbank Water and Power has been contacted to evaluate and investigate the layout and

spacing of their streets lights, wattage, and any maintenance issues along Clark Avenue between Keystone Street and Parish Place. At the Site Council meeting, the school administration emphasized that the proposed stop sign on Clark Avenue at Lamer Street will be more visible at night with additional street lighting. The Site Council also emphasized that the additional lighting would help the visibility of the existing crosswalks.

RECOMMENDATIONS:

Receive the staff report and the School Safety Subcommittee suggestions and provide a recommendation to City Council.

ATTACHMENTS:

1. June 2010 Agenda Report on JBHS and related attachments.
2. Map of JBHS, proposed one-way couplet and surroundings.

TRAFFIC COMMISSION REPORT
June 24, 2010

Item VF

TRAFFIC ISSUES AT BURROUGHS HIGH SCHOOL

ISSUE:

Several traffic related issues have been voiced regarding Burroughs High School. Staff has discussed and responded to the issues, but the problems could use a broader review by the Traffic Commission. These issues could be addressed by the subcommittee.

BACKGROUND:

We have received requests by both the school administration and by the Student Site Council. Both requests have been investigated and changes made to the traffic and parking system. The requests by the school principal, Mr. Urioste, are as follows:

- He wants to deemphasize Clark Avenue as a student drop-off area and emphasize Parish Place. Consequently, he requested additional area be set aside on Parish Place for this function. Additionally, he plans to minimize the Clark Avenue drop-off area by rerouting parents through the school parking lot north of Clark Avenue using school personnel to facilitate the change. We have not yet looked at possible parking changes on Clark Avenue because the other modifications have not yet been implemented.

The School Site Council requested several changes to the travel system around the school as listed in Attachment 1. Those changes are:

- A stop controlled intersection be installed at Clark Avenue and Lamer Street. Since both intersections on either side of this intersection are currently stop controlled, we recommended that signs not be installed.
- Signage on Clark Avenue warning that students are present. These types of signs are not part of the standard signage for schools in California, so we suggested that they not be installed.
- Remove some old crosswalk markings that are inconsistent with existing student walking patterns. We have agreed to black out these markings.

Several other potential changes may impact the issues stated by the school administration and students. The school administration plans are likely to impact the requests made by the Site Council which would decrease traffic on Clark Avenue. Additionally, the Burbank Planning Department is investigating traffic calming measures on Clark Avenue which will impact traffic on the street. Finally, we are applying for a Safe Routes to School grant which has some traffic implications for Burroughs High School. Details of the grant will be discussed at the meeting.

DISCUSSION:

Various traffic and parking issues have been discussed at Burroughs High School, and several planning opportunities exist to relieve traffic congestion at the school. These measures need to be addressed on an area-wide basis to insure they do not conflict or are unnecessary.

RECOMMENDATIONS:

Incorporate Burroughs High School issues into the subcommittee school safety review.

ATTACHMENTS:

1. Letter from Burroughs Site Council
2. Letter from city staff responding to the issues

DOC SENT MAY 11 '10

orig: Mike
cc: Teaford

James DeKay
John Burroughs High School
1920 West Clark Avenue
Burbank, CA 91506
818-558-4777 x61902

CITY OF BURBANK
CITY MANAGER'S OFFICE
'10 MAY 10 A10:47

May 4, 2010

Michael Flad
Office of the City Manager, City Hall
275 East Olive Avenue
P.O. Box 6459
Burbank, CA 91510-6459
Office Telephone: (818) 238-5800
Fax: (818) 238-5804

Dear Mr. Flad,

I am writing to follow up on the Joint Traffic Commission meeting held last Thursday which the principal of my school, Emilio Urioste, and ninth grade school site council member Liam Vogel attended. You seemed interested when hearing their concerns about traffic safety around Burroughs High School and I, as a member of the school's site council myself, am following up to outline once again what we consider to be serious issues of safety around our school.

For those of us who work at Burroughs and observe daily the thousands of inexperienced young people who drive, walk and bike around the school it is of great importance that the city consider our requests and act upon those that are immediately feasible. Ken Johnson, assistant public works director and traffic engineer at the Public Works Department, himself recognized yesterday at a site council meeting that a prior study done to assess traffic around Burroughs did not take into account the specific times of day when very high numbers of inexperienced drivers (and pedestrians) use the limited road space around the school.

Below are the specific suggestions we make. They are not complex solutions. They are simple and logical ways to alleviate and slow the traffic around our school and make things safer for the students, staff and community.

1. **Stop signs**: Our biggest priority is stop signs on West Clark at the corner of Lamer. Currently, cars drive fast down West Clark in front of the school because nothing slows them down. There are cross walks from the north side of West Clark to the side of the school at Lamer, but cars do not always yield to pedestrians there. Stop signs on West Clark at both sides of the intersection make great sense and there seems little reason why there could not be a three-way stop there. It might also prevent people from using West Clark, *a street that runs the entire length of a 2,700 student high school*, as a thoroughfare.

2. **Signage**: Approaching West Clark on either Parish or Keystone from Verdugo entails driving the entire length of the school and its sports facilities. Students cross these streets on their way to lunch or other destinations without going to a crosswalk first. Cars approach the intersections with West Clark at relatively high speeds. If there were signs on the sides of Paris and Keystone that read, "Stop Ahead" or "Students Crossing" this might make drivers less likely to speed on these roads that are heavily trafficked by student pedestrians.

3. **Repainting**: On Parish, just south of West Clark, and at other locations around the school, there are the increasingly visible remnants of an old cross walk. This makes students think they can cross at these places. It would be helpful if the city erased thoroughly the old lines and, in addition to the proposed signage on the side of the road mentioned above, painted warnings on the road itself that the real cross walks are ahead and/or to slow down as there are students crossing in the area. In particular, these would be helpful for traffic coming from Verdugo toward West Clark. (**Note**: the city may this week act upon this specific request as it is the easiest to remedy.)

The above ideas emerged from ongoing conversations in the school community including those of the school's site council. They are simple ideas for the city to take in order to decrease the risk that a student at Burroughs one day be hurt by a car driving too fast around the school's perimeters or in an area where students are not supposed to cross.

Please let me know what you plan to do about this safety issue; I thank you for your attention to the matter.

Sincerely,

James DeKay
Teacher, John Burroughs High School

CC: Ken Johnson

PUBLIC WORKS
DEPARTMENT

CITY OF BURBANK
275 EAST OLIVE AVENUE, P.O.BOX 6459, BURBANK, CALIFORNIA 91510-6459
www.ci.burbank.ca.us

June 8, 2010

Mr. James DeKay
John Burroughs High School
1920 West Clark Street
Burbank CA 91506

RE: John Burroughs High School and Traffic Concerns

Dear Mr. DeKay,

Thank you for sharing your input in your recent letter to the City Manager. This was forwarded to the Traffic Division for further response. Please allow me to take the opportunity to address the three suggestions you made in that letter:

1. **Stop Signs at Lamer and Clark**- In your letter you requested additional stop signs on Clark to make that intersection a three-way stop.

   In response, as this was requested by Mr. Urioste in February, we have already collected all required data for the evaluation of a potential three-way stop at this interaction. Unfortunately, the collected data does not justify that installation. If the school representative is not in agreement with staff findings, the matter can be presented to the Traffic Commission in the near future for their input and decision, if desired. In the meantime, to address your concern with vehicles speeding and not yielding to pedestrians crossing Clark, we have requested our Police Department to have selective enforcement in the area as officers are available.

2. **Signage along Clark**- In your letter you suggested having advance warning signs on Clark approaching Keystone and Parish such as "STOP AHEAD" or "Student Crossing".

   In response, the two intersections of Clark/Keystone and Clark/Parish are already four-way stops, and traffic in all directions is required to stop at those intersections. In order to install any traffic control devices or any additional signs, we are required to follow the "Manual on Uniform Traffic Control Devices" (or MUTCD) practices, accepted by the State of California-Department of Transportation (known as Caltrans). The

suggested signs are not recommended, since the vehicles are already required to obey the law and come to a full stop at these intersections.

3. **Repainting of the X-Walks and removing the old markings**--You are concerned with the remainder of old cross walk markings on Keystone immediately south of Clark, as well as the one on Clark immediately east of Lamer .

   In response, these old markings, prior to the removals three years ago, were painted several times over fresh asphalt for at least twenty years. We have tried to remove them as much as possible; by attempting to remove more, it will cause major damage to the roadways. We are, however, planning to cover them with black paint as well as refresh all of the pavement markings around the school prior to reopening of school in August.

During my meeting with Mr. Urioste in February, he also requested additional drop off areas along Keystone and Parish, which we agreed to have done prior to next school year.

In addition, City Community Development is considering a project which would enhance Clark Avenue by connecting schools and parks along the primarily residential corridor with a bicycle boulevard by using series of treatments designed to slow and reduce traffic, there by maintaining the residential nature of the neighborhood, and increasing safety for both cyclists and pedestrians alike.

I hope this letter sufficiently addresses your concerns, and would like to thank you again for your suggestions and input. If you have any further questions, please do not hesitate to call me at (818) 238-3969.

Sincerely;

Rabie J. Rahmani, P.E.
Principal Traffic Engineer

cc: Mike Flad, City Manager
Bonnie Teaford, Public Works Director
Ken Johnson, City Traffic Engineer
Emilio Urioste, John Burroughs High School Principal

John Burroughs High School

Legend

- Freeways
- Major Boulevards
- Railroads
- Streets
- Golf Courses
- Studios
- Parks
- Airport
- Airport Boundary
- Schools

This map is intended for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

Notes: Proposed Couplets:

Parish S/B
Keystone NB

TRAFFIC COMMISSION REPORT
December 16, 2010

Item VE

LNCV STATUS REPORT

ISSUE:

Traffic Commission requested that staff provide monthly updates on the large Non-Commercial Vehicle (LNCV) parking permit development process.

DISCUSSION:

A total of forty-two 24"X36" signs were installed at all gateways to the City. The signs include the telephone number and website to go to for more information.

The LNCV permit development process is currently underway with Edgesoft, Inc. and IT staff. Public Works has weekly meetings scheduled for the next several months. The projected time frame for completion of the LNCV component is January 2011. The "go live" date is January 17, 2011.

Staff had also prepared an informational flyer on the new ordinance which was posted on the City's website and distributed for handout at City Hall, the Community Services Building, the two libraries, and City recreation centers. Copies of this flyer are also being distributed and placed on LNCVs by Burbank Police/Parking Enforcement Officers.

CONCLUSIONS:

The LNCV signs have been installed and permit documentation is proceeding on schedule.

TRAFFIC COMMISSION REPORT
December 16, 2010

Item VF

FAIRVIEW STREET PARKING RESTRICTIONS

ISSUE:

A resident on Fairview Street between Empire Avenue and Thornton Avenue requested that existing parking restrictions on the southern portion of the street be extended to the full length of the street. The Traffic Commission discussed this issue at the October meeting and requested that residents of Fairview Street be notified of the parking discussion. Notification was sent to all residents of this meeting.

BACKGROUND:

Fairview Street between Empire Avenue and Thornton Avenue is a residential street with a combination of single and multi-family dwellings. This section of Fairview Street includes the 2200 and 2300 block addresses. Street sweeping restrictions are in place on the street for Thursday 10-12 AM on the west side and for Friday 2-4 PM on the east side along the full block. The resident permit parking only was installed in 1999 and is in place only on the 2200 block of the street, whereas the 2300 block has no restrictions other than the street sweeping restrictions. The resident only parking is only available to those living in the 2200 block of Fairview Street, and is also available to nine residents of the 2200 block of Ontario Street, one block to the west of Fairview Street.

Ontario Street has similar street sweeping restrictions as Fairview Street, and the street also has a two hour parking restriction on the west side of the street. Residential uses exist on the east side of Ontario Street and the west side has only commercial land uses. The parking restrictions and permit availability is highly unusual. The general area is shown in Attachment 1.

DISCUSSION:

As indicated above, the resident only parking restrictions on Fairview Street were installed in about 1999. Public Works records do not identify why or how the restrictions were installed. The restrictions did not follow the usual process involving a petition from residents and a progressively more limiting restriction (2 Hr, 1 Hr, and then resident only).

Residential uses in the 2200 block, south of the redevelopment project, are primarily single family dwellings while the uses north of the project, in the 2300 block, are primarily apartment uses. All residential uses, both single family and apartment have off street parking.

Sixteen condominium units and a total of 20 single family residential dwellings are eligible for the resident only parking permits. Thus a total of 26 families can have access to the permit only parking. In recent years, about 24 of the 26 families have requested the free resident only permits (a total of 72 permits). The resident only, on-street parking on Fairview Street is comprised of 28 to 29 spaces.

CONCLUSIONS:

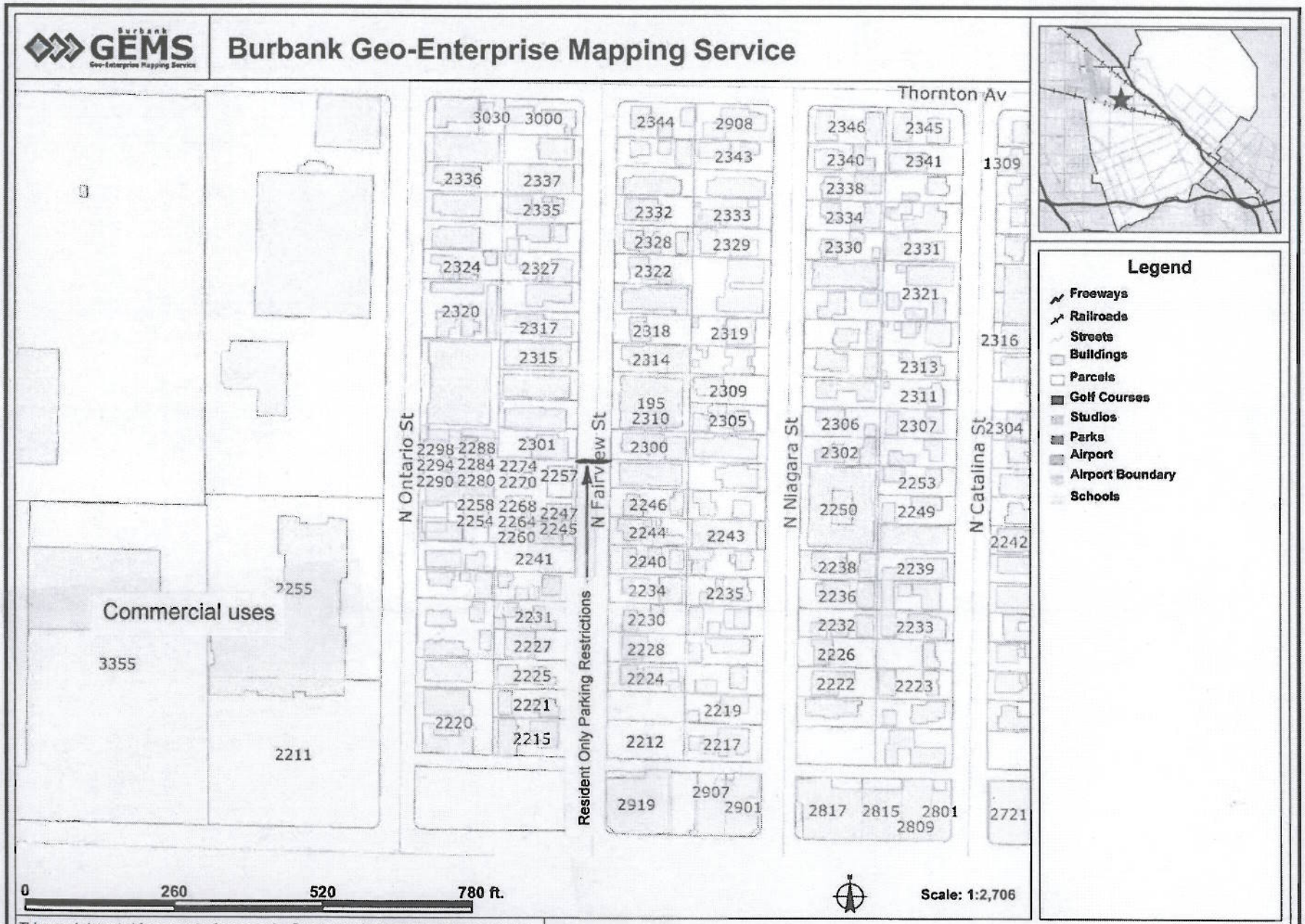
The existing parking restrictions on Fairview Street are not standard, and they were established without the standard process. The restrictions favor the single family residential uses on the south end of the street while eliminating on-street parking for the apartment dwellers on the north end. The 29 available on-street parking spaces in the restricted zone are totally insufficient to accommodate all permit parking. Permit holders have access to all on-street parking in the 2200-2300 blocks of Fairview Avenue, while the non-permit holders are restricted to the parking on half the street. The current restrictions are not equitable.

RECOMMENDATIONS:

Staff requests that the Traffic Commission endorse the removal of the resident only parking restrictions.

ATTACHMENTS:

1. Fairview Street Area Map



Attachment 1
Fairview Street Area Map

TRAFFIC COMMISSION REPORT
December 16, 2010

Item VIA

PUBLIC HEARING ON THE CONVENIENCE AND NECESSITY FOF AMBULANCE SERVICES BY BOWERS AMBULANCE

ISSUE:

Bowers Ambulance 3355 East Spring Street, Suite 301, Long Beach, CA applied for a certificate of need and necessity to operate in the City of Burbank. This request was received in late October 2010 and discussed at the November meeting. The Traffic Commission tabled the request until a representative of Bowers is available for questions. Bowers Ambulance was notified of the December meeting.

DISCUSSION:

The Burbank Municipal Code (BMC) Section 13 (3-4-1302) requires that any non-emergency ambulance service obtain a certificate of convenience and necessity from the Traffic Commission. The requirements of Section 13 are shown in Attachment 1. Section 3-4-1304 states the six requirements to obtain a convenience and necessity certificate. The Bowers Ambulance application includes the basic information required by the Municipal Code. The Bowers Ambulance information is shown in Attachment 2

The County of Los Angeles certifies the operations and personnel of any non-emergency ambulance service. The CHP certifies the physical equipment (vehicles) for EMS service, while the County certifies the personnel, their training, and other required equipment in the ambulance. Bowers Ambulance provides both non-emergency transportation and critical care transportation.

Historically, the Traffic Commission has relied on the licensing requirements of the County of Los Angeles as a measure of the serviceability of the proposed service. The Traffic Commission has not approved non-emergency ambulance services that are not certified by the County. Bowers Ambulance is certified by the County (Attachment 3). Additionally, the Traffic Commission has approved those services that are in close proximity to the City of Burbank, and this company is reasonably close.

The BMC requires that interested organizations be notified of the public hearing. Schaefer Ambulance Service was notified.

RECOMMENDATION:

Bowers Ambulance is certified by the County of Los Angeles; therefore it does meet the minimum requirements established by the Traffic Commission for ambulance operations in Burbank. Staff recommends the application be approved.

VIA Attachment 1 – BMC Codes 3-4-1304 to 3-4-1306

3-4-1304: INVESTIGATION AND HEARING:
Upon the filing of such application, the License Division shall refer the application to the Traffic Commission, which shall investigate the matter and conduct a hearing, if it deems a hearing to be necessary. Notice of such hearing shall be given to all persons to whom permits and Certificates of Public Convenience and Necessity have been issued. Due notice shall also be given the general public by posting a notice of such hearing in the main lobby of the City Hall and as required by California's Ralph M. Brown Act (Gov.C. Sections 54950 et seq.). Any interested person may file with the Traffic Commission a memorandum in support of or opposition to the issuance of a permit and certificate. At such hearing testimony and other evidence may be received. The Traffic Commission shall have power to determine all issues relative to the granting or denying of such permits and certificates. [Formerly numbered Section 8-109; renumbered by Ord. No. 3058, eff. 2/21/87; Amended by Ord. No. 3755, eff. 12/26/08; 3048, 2194.]

3-4-1305: GRANTING PERMIT AND CERTIFICATE:
Upon completing its investigation or hearing, the Traffic Commission shall grant the applicant a permit and Certificate of Public Convenience and Necessity if it finds that further private ambulance service in the City is required by the public convenience and necessity and that the applicant is fit, willing, and able to perform such public transportation and to conform to the provisions of this article and the rules promulgated by the Traffic Commission; otherwise, the application shall be denied. In making its finding, the committee shall take into consideration the number of private ambulances already in operation, whether existing transportation is adequate to meet the public need, the probable effect of increased service on local traffic conditions, and the character, experience, and responsibility of the applicant. Every person holding a valid license and permit to engage in the private ambulance business in the City, who was not required to obtain a Certificate of Public Convenience and Necessity at the time of obtaining such license and permit, shall be deemed to be providing private ambulance service in the City required by the public convenience and necessity, and shall also be deemed to be fit, willing and able to perform such public transportation and to conform to the provisions of this article and the rules promulgated by the Traffic Commission, and a Certificate of Public Convenience and Necessity shall be issued by the committee to such person without application therefor and without a public hearing thereon. [Formerly numbered Section 8-110; renumbered by Ord. No. 3058, eff. 2/21/87; Amended by Ord. No. 3755, eff. 12/26/08; 2194.]

3-4-1306: ISSUANCE OF PERMIT AND CERTIFICATE:
If the permit and Certificate of Public Convenience and Necessity are granted, the Traffic Commission shall approve the application therefor and transmit the same to the License Division for issuance of the permit and certificate. The certificate shall state the name and address of the applicant, the number of vehicles authorized under the certificate and the date of issuance. [Formerly numbered Section 8-111; renumbered by Ord. No. 3058, eff. 2/21/87; Amended by Ord. No. 3755, eff. 12/26/08; 2194]